To: The Select Board
From: Solid Waste Advisory Committee
Date: Oct. 19, 2021
Re: Artificial Turf Fields

The Solid Waste Advisory Committee has been working with the DPW to develop a Zero Waste Framework to guide the Town in managing Solid Waste. This framework has been developing over the last few months assisted by a nationally known consulting team. The goal has been to reduce all the town's waste not just that from those who subscribe to our municipal residential service.

One of the primary initiatives is to reduce toxic waste, which is expensive to dispose of and requires special handling. Toxics reduction needs to consider emerging chemicals such as PFAS along with those that are currently on the state's list such as lead and mercury. PFAS is family of thousands of synthetic petrochemicals of varying human and environmental toxicity that are extremely persistent in the environment leading them to be dubbed "forever chemicals."

Artificial turf fields are composed of a proprietary mix of various types of plastic. The Canadian government this year completed a technical review process that resulted in *all* plastic products being declared toxic. Plastic is unsustainable since it is derived from fossil fuels, especially fracked natural gas. Plastic has significant climate impacts throughout its life cycle. Plastic production is an environmental justice issue since it harms the factory workers and neighbors who are most often low income and people of color.

PFAS can be found in artificial turf in two ways:
1) PFAS can be included in plastic products as a co-polymer. While not revealed by manufacturers, all plastic turf blades appear to contain PFAS as an additive to improve strength and chemical resistance.
2) PFAS are used to manufacture plastic products. They then become contaminants in the finished products. PFAS might be found in the blades and backing material, and geotextiles and shock pads underneath the blades.

The useful life of turf fields is around ten years. At the end of that time, the turf generates about 50 tons/acre of waste and is considered construction and demolition debris. Though industry claims that turf can be recycled, this is unproven. Even if recycling is possible it would be low-quality and impractical. Given the toxic nature of plastic, recycling is not a desirable solution.

We advise the Board to consider these issues before the construction of Driscoll begins. We also advise the Board to push for an environmental purchasing policy so that solid waste and toxic concerns can be addressed early in future design phases.